

Canada's Top 100 Corporate R&D Spenders List 2012 Analysis

R&D Spending Jumps

Canada's Top 100 Corporate R&D Spenders posted a surprising 6.1% increase in their combined spending on research and development in Fiscal 2011. This counters a severe -9.4% decline in R&D spending last year and breaks a 5-year string of R&D declines. Revenues improved even more strongly than R&D among the 92 companies that provided revenue data, rising by 10.4% year-over-year.

Research In Motion Limited retained its hold on first place in the national ranking, spending over \$1.5 billion on R&D, a 10.8% improvement. Bombardier Inc. jumped 8 positions in the ranking with a 27.0% increase and total spending of over \$1.3 billion.

Research intensity – R&D spending divided by revenues – was 2.7% in Fiscal 2011 (for the 92 Top 100 firms that provided revenue data), which was a decline of -3.5% from the previous year. Faster growth in revenues than in R&D spending accounted for the drop.

In Fiscal 2011, 63 companies posted increases in their research spending compared with 35 firms where spending dropped. (R&D spending was flat at 2 other companies.) This compares with only 48 firms that increased their R&D spending last year.

The \$100 Million Club

Each year RESEARCH Infosource highlights the companies in its \$100 Million Club – an elite group of firms that spend \$100 million or more annually on R&D. In Fiscal 2011, 24 firms gained Club status, compared with 23 firms last year. Fifteen members were Canadian companies and 9 were foreign subsidiaries. New to the Club this year were Vale Canada, Constellation Software and Cenovus Energy.

Total Club spending on research was \$8.14 billion, a rise of 7.2%, which was better than the 6.1% all-company increase and much better than the combined 2.9% R&D spending increase for non-Club firms.

The \$100 Million Club		
2011 Rank	Company	Industry
1	Research In Motion	Comm/Telecom Equipment
2	Bombardier	Aerospace
3	BCE	Telecommunications Services
4	Magna International	Automotive
5	IBM Canada (fs)	Software & Computer Services
6	Pratt & Whitney Canada (fs)	Aerospace
7	Atomic Energy of Canada	Engineering Services
8	Ericsson Canada (fs)	Comm/Telecom Equipment
9	AMD Canada (fs)	Electronic Systems & Parts
10	Alcatel-Lucent (fs)	Comm/Telecom Equipment
11	Cenovus Energy	Energy/Oil & Gas
12	TELUS	Telecommunications Services
13	Apotex	Pharmaceuticals/Biotechnology
14	Imperial Oil	Energy/Oil & Gas
15	Sanofi (fs) ^(a)	Pharmaceuticals/Biotechnology
16	Open Text	Software & Computer Services
17	Ontario Power Generation	Electrical Power & Utilities
18	GlaxoSmithKline Canada (fs)	Pharmaceuticals/Biotechnology
19	CAE	Aerospace
20	Pfizer Canada (fs)	Pharmaceuticals/Biotechnology
21	Rogers Communications	Telecommunications Services
21	Vale Canada (fs)	Mining & Metals
23	Constellation Software	Software & Computer Services
24	Hydro-Québec	Electrical Power & Utilities

fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

^(a) Includes Sanofi Canada and Sanofi Pasteur Limited

Reflecting the importance of larger R&D performers, the \$100 Million Club members accounted for 74% of total Top 100 R&D spending in Fiscal 2011.

Once again, companies in the ICT (information and communications technology) sector dominated the \$100 Million Club.

Industry Performance

In Fiscal 2011, 13 Top 100 performers in the Communications/Telecom Equipment sector spent a total of nearly \$2.48 billion on research and development, accounting for 23% of the total. However, 5 Aerospace firms were not far behind, spending a total of \$2.01 billion or 18% of Top 100 R&D spending. Twenty-one Pharmaceuticals/Biotechnology firms spent a total of \$1.27 billion, accounting for 12% of the total R&D spending, down from 13% of the total in Fiscal 2010, which represented a significant -8.3% spending drop from the previous year. All ICT sectors combined accounted for 46 of the Top 100 total, which indicates the importance of the sector in gauging overall Canada's R&D performance.

Top 100 – Leading Industries	
Industry	R&D Spending (% of Total)
Communications/Telecom Equipment (13)	23
Aerospace (5)	18
Pharmaceuticals/Biotechnology (21)	12
Software & Computer Services (12)	9
Telecommunications Services (4)	8
Automotive (4)	6
Energy/Oil & Gas (8)	6
Electronic Systems & Parts (8)	5

The Top 10 R&D Intensive Firms

In Fiscal 2011, 5 of the 10 most research-intensive firms – companies that spent a high proportion of revenues on R&D – were in the Pharmaceuticals/Biotechnology sector. This is down from 7 such firms in 2010, which reflects the softness in this sector.

Top 10 Research Intensive Companies*			
2011 Rank		Company	R&D as % of Revenue
Research Intensity	Overall		
1	87	Cardiome Pharma	1,011.3
2	78	Tekmira Pharmaceuticals	119.7
3	45	QLT	103.1
4	7	Atomic Energy of Canada	87.0
5	69	AEterna Zentaris	69.1
6	30	PMC-Sierra (fs)	63.7
7	79	Bioniche Life Sciences	54.9
8	70	DragonWave	52.6
9	89	NexJ Systems	47.4
10	58	Sandvine	35.3

*Based on companies with \$1 million or more of revenue only
fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

Gainers and Losers

The 10 leading firms in R&D spending growth in Fiscal 2011 all increased their spending by 55.0% or more. The largest gainer was Celestica, which recorded a 341.7% gain in R&D spending. Martinrea International posted an impressive increase of 225.7% in its spending, followed by Canadian Solar (178.4%), Neo Material Technologies (135.6%) and Dorel Industries (127.2%).

Top 10 Companies by Growth			
2011 Rank		Company	% Change 2010-2011
R&D Growth	Overall		
1	95	Celestica	341.7
2	68	Martinrea International	225.7
3	80	Canadian Solar	178.4
4	64	Neo Material Technologies	135.6
5	57	Dorel Industries	127.2
6	71	Oncolytics Biotech	91.8
7	54	Trican Well Service	86.0
8	38	Aptalis Pharma (fs)	75.6
9	21	Vale Canada (fs)	62.7
10	59	Total E&P Canada (fs)	55.0

fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

A number of established companies led the list of firms where R&D spending dropped substantially in Fiscal 2011. This group included Merck (-66.7%), BCE (-30.7%) and GlaxoSmithKline Canada (-26.6%).

Bottom 10 Companies by Growth			
2011 Rank		Company	% Change 2010-2011
R&D Growth	Overall		
1	66	Merck (fs)	-66.7
2	3	BCE	-30.7
3	18	GlaxoSmithKline Canada (fs)	-26.6
4	77	Resolute Forest Products (fs)	-25.4
5	20	Pfizer Canada (fs)	-22.0
6	50	EnCana	-20.6
7	83	Teck Resources	-19.0
8	75	Xerox Canada (fs)	-18.7
9	40	AstraZeneca Canada (fs)	-16.1
10	94	Hydro One	-15.0

fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

Looking Ahead

The 2012 Top 100 Corporate R&D Spenders List comes as a pleasant surprise, with spending jumping by 6.1% in total, breaking a moribund 5-year cycle. R&D spending growth was propelled by an overall 10.4% increase in revenues, which was the highest rate of revenue growth we have recorded since Fiscal 2008. However, the industry sector data reveal a worrying drop in R&D spending in the Pharmaceuticals/Biotechnology and Telecommunications Services sectors. Had those sectors' R&D spending not dropped the overall Top 100 result would have been even better.

The positive 2012 result reflects the situation faced by many companies in Fiscal 2011, a year which saw corporate revenues and profits hold up quite well in the face of deteriorating global economic dynamics. Undoubtedly, the strength of the Canadian dollar also gave some momentum to R&D spending. However, stripping out the results for the 24 largest R&D performers a more cautionary tale emerges. R&D spending by the other 76 firms on the list expanded by only 2.9%, a far more modest result.

The 2012 list was enhanced by strong spending growth at Research In Motion and Bombardier. Since posting its data RIM's fortunes have turned and cost saving has been the order of the day. This implies that RIM's results next year will be pressed to match Fiscal 2011. Bombardier is investing heavily to develop its new C-Series aircraft, which accounts for much of its 27.0% spending increase. At some point that spending will also come off the boil. These examples indicate that a great deal of corporate R&D spending is opportunity-driven and episodic, which from a company standpoint is rational, but which adds volatility to the data on national research performance.

The Spring 2012 federal budget made some substantial changes to Canada's premier corporate R&D support program, the Scientific Research and Experimental Development tax incentives. (A considerable amount of provincial government support is also linked to SR&ED.) The impact of the changes will be to diminish support for companies' R&D capital and overhead expenses starting this year. If these changes turn out to be a large influence on firms' research performance, then we would expect the positive Fiscal 2011 result to revert to trend – i.e. anaemic performance. So the big question is “*Was Fiscal 2011 an anomaly or a signpost to the future*”? We will find out next year.